

Appl. No. 10/657,231
Amendment dated: July 20, 2004
Reply to OA of: April 21, 2004

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1(original). An MCM package with bridge connection, comprising:
a carrier having an upper surface and a lower surface opposed to the upper surface;
a first chip having a first active surface, a first back surface, a first side surface connecting the first active surface and the first back surface, and a first bonding pad formed on the first active surface and electrically connected to the carrier;
a second chip having a second active surface, a second back surface, a second side surface connecting the second active surface and the second back surface, and a second bonding pad formed on the second active surface, and electrically connected to the carrier; and
a first conductive body disposed continuously on the first active surface and the second active surface, and electrically connecting the first chip and the second chip.

2(original). The MCM package of claim 1, further comprising an encapsulation covering the first chip, the second chip, the upper surface of the carrier and the first conductive body.

3(original). The MCM package of claim 1, wherein the first back surface is attached on the upper surface of the carrier and the second back surface is attached on the upper surface of the carrier.

4(original). The MCM package of claim 1, further comprising a plurality of solder balls disposed on the lower surface of the carrier.

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5(original). The MCM package of claim 1, wherein the first bonding pad is disposed at an edge of the first active surface of the first chip.

6(original). The MCM package of claim 1, wherein the second bonding pad is disposed at an edge of the second active surface of the second chip.

7(original). The MCM package of claim 1, wherein the first conductive body is made of a material selected from the group consisting of tin-lead alloy, lead-free alloy and conductive epoxy.

8(original). The MCM package of claim 1, wherein the first bonding pad is adjacent to the second bonding pad.

9(original). The MCM package of claim 1, wherein the first side surface is adjacent to the second side surface.

10(original). The MCM package of claim 1, wherein the first active surface is coplanar to the second active surface.

11(original). The MCM package of claim 1, further comprising a plurality of first conductive wires electrically connecting the first chip and the carrier.

12(original). The MCM package of claim 1, further comprising a plurality of second conductive wires electrically connecting the second chip and the carrier.

13(original). The MCM package of claim 10, wherein a filler is disposed between the first side surface and the second side surface and the filler has a top surface coplanar to the first active surface and the second active surface.

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14(original). The MCM package of claim 1, wherein the carrier further comprises an opening, and the first chip and the second chip are disposed in the opening.

15(original). The MCM package of claim 14, further comprising a heat spreader disposed on the lower surface of the carrier.

16(original). The MCM package of claim 15, further comprising a plurality of solder balls disposed on the upper surface of the carrier.

17(original). The MCM package of claim 14, wherein the opening has an inner wall, the first chip and the second chip has a third side surface and a forth side surface respectively, and the inner wall is proximate to the third side surface and the fourth side surface.

18(original). The MCM package of claim 14, wherein the first active surface, the second active surface and the carrier are coplanar with each other.

19(original). The MCM package of claim 17, further comprising a heat spreader disposed on the lower surface of the carrier.

20(original). The MCM package of claim 18, further comprising a heat spreader disposed on the lower surface of the carrier.

21(original). The MCM package of claim 19, further comprising a plurality of solder balls disposed on the upper surface of the carrier.

22(original). The MCM package of claim 20, further comprising a plurality of solder balls disposed on the upper surface of the carrier.

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23(original). The MCM package of claim 14, further comprising a plurality of first conductive wires electrically connecting the first chip and the carrier.

24(original). The MCM package of claim 14, further comprising a plurality of second conductive wires electrically connecting the second chip and the carrier.

25(original). The MCM package of claim 17, further comprising a second conductive body connecting the first chip and the carrier.

26(original). The MCM package of claim 17, further comprising a second conductive body connecting the second chip and the carrier.

27(original). The MCM package of claim 18, further comprising a second conductive body connecting the first chip and the carrier.

28(original). The MCM package of claim 18, further comprising a second conductive body connecting the second chip and the carrier.

29(new). An MCM package with bridge connection, comprising:
a carrier having an upper surface and a lower surface opposed to the upper surface;

a first chip having a first active surface, a first back surface, a first side surface connecting the first active surface and the first back surface, and a first bonding pad formed on the first active surface and electrically connected to the carrier;

a second chip having a second active surface, a second back surface, a second side surface connecting the second active surface and the second back surface, and a second bonding pad formed on the second active surface, and electrically connected to the carrier, wherein the first side surface is adjacent to the second side surface; and

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a first conductive body disposed continuously on the first active surface and the second active surface, and electrically connecting the first chip and the second chip.

30(new). An MCM package with bridge connection, comprising:

a carrier having an upper surface and a lower surface opposed to the upper surface;

a first chip having a first active surface, a first back surface, a first side surface connecting the first active surface and the first back surface, and a first bonding pad formed on the first active surface and electrically connected to the carrier;

a second chip having a second active surface, a second back surface, a second side surface connecting the second active surface and the second back surface, and a second bonding pad formed on the second active surface, and electrically connected to the carrier; and

a first conductive body disposed continuously on the first active surface and the second active surface, extended directly from the first active surface to the second active surface, and electrically connecting the first chip and the second chip.